

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/772,621	02/05/2004	Robert Amin	TS9536 (US)	4913	
23632	7590 05/15/2006		EXAMINER		
SHELL OIL COMPANY			DOERRLER, WILLIAM CHARLES		
P O BOX 2463 HOUSTON, TX 772522463			ART UNIT	PAPER NUMBER	
,			3744		
			DATE MAIL ED. 05/15/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
Office Action Summary		10/772,621	AMIN ET AL.				
		Examiner	Art Unit				
		William C. Doerrler	3744				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	J. lely filed the mailing date of this co D (35 U.S.C. § 133).	,			
Status							
1)	Responsive to communication(s) filed on 17 Ag	oril 2006.					
	This action is FINAL . 2b) This action is non-final.						
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Dispositi	ion of Claims						
4)🖂	4) Claim(s) 25-48 is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)	Claim(s) is/are allowed.						
6)⊠	Claim(s) <u>25-29</u> is/are rejected.						
7)🖾	Claim(s) 30-48 is/are objected to.						
8)□	Claim(s) are subject to restriction and/or election requirement.						
Applicati	ion Papers						
9) The specification is objected to by the Examiner.							
10)⊠ The drawing(s) filed on <u>17 April 2006</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority ι	under 35 U.S.C. § 119						
	12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:						
	 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 						
	3. Copies of the certified copies of the prior	·	d in this National	Stage			
	application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
1) 🔀 Notic 2) \square Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4) LInterview Summary Paper No(s)/Mail Da					
3) 🔲 Inforr	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	5) Notice of Informal P. 6) Other:)-152)			

Application/Control Number: 10/772,621

Art Unit: 3744

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

The drawings were received on 4-17-2006. These drawings are acceptable.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 25 is rejected under 35 U.S.C. 102(e) as being anticipated by Minta et al (6,539,747).

Minta et al disclose a method for treating natural gas which removes water in a first vessel 11 and removes solidified sour species from a second vessel through line 22b.

Claims 25-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Jackson et al (3,312,073).

Jackson et al show a system for treating natural gas which removes water in vessel 3 and cools the remaining gas to form a slurry of natural gas and solidified carbon dioxide

Art Unit: 3744

(in tank 30, with the sweetened gas being removed in separator 32). The stream entering each vessel is cooled prior to entering the vessel. In regard to claims 26 and 27, it is noted that applicant has not claimed that hydrates are formed. Applicant has merely claimed that the temperature in the first vessel is at a temperature at which hydrates are formed. Hydrates can be formed at different pressures and using different gases which are entrained in the crystals. The temperature in the first vessel of Jackson et al is a temperature at which a hydrate can be formed. Hydrates are not taught to be formed in the vessel, but the temperature is such that using a different chemical and increasing the pressure, hydrates could form. Claims 26 and 27 would be allowable if the formation of hydrates in the vessel is clearly claimed. Likewise the 38 has been objected to below, but "the hydrates" lacks clear antecedent basis as the hydrates are not clearly claimed in claim 26.

Allowable Subject Matter

Claims 30-48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Doerrler whose telephone number is (571) 272-4807. The examiner can normally be reached on Monday-Friday 6:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

William C Doerrler

Page 5

Primary Examiner Art Unit 3744

WCD